Attorney Docket No.: 10/826,269

AMENDMENT UNDER 37 C.F.R. § 1.111 U.S. Application No.: 10/826,269

REMARKS

Claims 1 and 2 have been examined and have been rejected under 35 U.S.C. § 112, first paragraph and under 35 U.S.C. § 103(a)

I. Preliminary Matters

The Examiner has objected to Figure 7 as not being labeled "prior art." Accordingly, Applicant is submitting herewith a formal replacement sheet with Figure 7 properly labeled. Also, since Figure 7 is an enlarged view of a magnetic path portion of Figure 6, Applicant is likewise submitting herewith a formal replacement sheet with Figure 6 properly labeled.

The Examiner also objects to the drawings under 37 C.F.R. § 1.83(a), as not showing every feature specified in the claims. In particular, the Examiner maintains that the recitation, "stationary core and said yoke are joined into one body by welding," is not shown in the Figures. Accordingly, Applicant has amended claim 1 for clarification, and submits that a drawing correction is therefore not necessary. Such amendment is not made in view of the prior art.

II. Rejections under 35 U.S.C. § 112, first paragraph

The Examiner has rejected claims 1 and 2 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the enablement requirement. Accordingly, Applicant has amended claim 1 in a manner believed to overcome the rejection. Such amendment is not made in view of the prior art and does not narrow the scope of the claim.

Attorney Docket No.: 10/826,269

AMENDMENT UNDER 37 C.F.R. § 1.111 U.S. Application No.: 10/826,269

III. Rejections under 35 U.S.C. § 103(a)

The Examiner has rejected claims 1 and 2 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,032,879 to Hamada et al. ("Hamada"), U.S. Patent No. 4,007,880 to Hans et al. ("Hans"), and U.S. Patent No. 5,190,221 to Reiter ("Reiter").

A. Claim 1

Applicant submits that claim 1 is patentable over the cited references. For example, claim 1 recites that a moving iron core is provided with a radial recess on the outer circumference of the moving iron core at a position facing a magnetic characteristic change portion produced in a yoke due to heat generated when the sleeve and the yoke are welded together. Further, the yoke and the sleeve do not protrude into the radial recess.

The Examiner continues to maintain that gap G3 of Hamada discloses the claimed radial recess (pg. 5 of Office Action). However, as shown in Fig. 1B of Hamada, a projection portion 3A of the yoke 3 protrudes into the alleged radial recess G3 of the moving core 4. In addition, it appears that a portion of the sleeve (i.e., portion above the projection 3A) also protrudes into the alleged radial recess G3. In Figure 2 of Hamada, the projection 3A is again shown to protrude or project into an alleged radial recess of the moving core 4. As disclosed in the December 16, 2004 Amendment, due to the projection 3A, magnetic flux will be concentrated. On the other hand, as set forth in the non-limiting embodiment of the present invention, magnetic flux lines passing through the moving iron core are detoured and flow through the underside of the radial

Attorney Docket No.: 10/826,269

AMENDMENT UNDER 37 C.F.R. § 1.111

U.S. Application No.: 10/826,269

recess (pg. 5, lines 11-19). This is beneficial in that it prevents the influence of the variation in magnetic characteristics and it is possible to suppress the variation in injection quantity characteristics of the products caused by the magnetic characteristic change portion due to the heat generated at the time of welding the sleeve and the yoke together (pg. 5, lines 20-26).

In view of the above, Applicant submits that Hamada fails to teach or suggest the claimed features. Further, since Hans and Reiter fail to cure the deficient teachings of Hamada, as set forth above, Applicant submits that claim 1 is patentable over the cited references.

B. Claim 2

Since claim 2 is dependent upon claim 1, Applicant submits that such claim is patentable at least by virtue of its dependency.

IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

7

AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: 10/826,269

U.S. Application No.: 10/826,269

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

Allison M. Tulino

Registration No. 48,294

SUGHRUE MION, PLLC Telephone: (202) 293-7060

Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373
CUSTOMER NUMBER

Date: May 17, 2005